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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,389	04/01/2004	Maged G. Botros	88-2070A;Cust.# 33967	9583
7590	03/30/2005		EXAMINER	
WILLIAM A. HEIDRICH			MULLIS, JEFFREY C	
Equistar Chemicals, LP			ART UNIT	
11530 Northlake Drive			PAPER NUMBER	
Cincinnati, OH 45249			1711	

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/816,389

Applicant(s)

BOTROS ET AL

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 12-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 504.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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This application contains claims directed to the following patentably distinct species of the claimed invention: Applicants are required to elect a single species of dispersed component by electing one of the materials in claim 8 (wherein the polyamides embrace those of claim 9) or one of the materials of claim 12.

Applicants are required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-7 are generic.

Applicants are advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicants will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicants must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicants traverse on the ground that the species are not patentably distinct, applicants should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103(a) of the other invention.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

During a telephone conversation with William Heidrich on 4-1-05 a provisional election was made with traverse to prosecute the invention of polyamides, claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claims 1-11 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The term "filler-type" as recited in claim 1 renders claim 1 unclear since it is subjective as to what materials can be said to be the type of a filler, especially since applicants recite the use of macromolecular materials such as are generally not viewed as fillers by those skilled in the art as being filler-type.

The term "graft to melt flow ratio" of claim 6 is not art recognized and is therefore unclear. Furthermore a "graft" is not a number and cannot be part of a ratio. Lastly no units are recited for the said ratio of claim 6 and it is therefore unclear what said ratio embraces for this reason also.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 7-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Chundury et al. (U.S. 5,317,059, cited by applicants).

Chundury in column 16 discloses a composition containing Profax homopolypropylene 6523, polycaproamide and Exxon 99-26. The Exxon 99-26 is an ethylene-propylene copolymer containing 0.35% of maleic acid or anhydride. Note column 12 lines 1-7 in this regard. With regard to the Profax 6523, it is believed that this material has a melt flow rate of 4 and is known to be isotactic and as claims 2 and 3 recite polypropylene base resins whose non-isotactic content may be as great as 6%, i.e. substantial amounts of non-isotactic materials may be present, it would reasonably appear that those skilled in the art would view a material described as isotactic polypropylene as embracing greater than 94 tacticity index.

Shin et al. (U.S. 6,303,682) disclose a composition containing "isotactic polypropylene" at column 3 line 44, an example of which is disclosed to be Profax 6523 at column 11 lines 25-40 where it is also disclosed that this material inherently has a melt flow rate of 4.

With regard to those claims such as claims 4 and 10 reciting a "reactor made intimate mixture", unpatented claims are given their broadest reasonable interpretation and any polymer is formed by chemical reactions, the apparatus in

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which it is formed can be said to be a chemical reactor. Therefore any mixture of polymers can be said to be a "reactor-made intimate mixture" so long as the materials are well mixed.

Claims 2-6, 10 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chundury et al., cited above in view of Ross et al., cited by applicants.

Arguably the Profax of Chundury et al. does not have applicants' tacticity index and there are no examples in which grafting of the ethylene propylene copolymer of Chundury et al. takes place result in greater than 1% of graft monomer (although such materials are disclosed to be usable by Chundury et al. at column 11 lines 45-50) and patentees are silent regarding molecular weight distribution of their ethylene propylene copolymers.

Ross et al. is incorporated by reference in applicants' specification for its disclosure of reactor made polypropylene/ethylene propylene copolymers and therefore such materials presumably have applicants' characteristics. Ross et al. at the first complete paragraph on page 152 et seq. disclose that impact grade copolymers (i.e. blends of homopolypropylene and ethylene-propylene rubber) can be made more efficiently by their process than by previously known processes and have particularly high impact values at the last complete sentence on page 152. Note also the last complete paragraph on page 154 in column 1 where it is disclosed that the materials have a narrow molecular weight distribution. Use of patentees' propylene/ethylene propylene copolymer blends or ethylene propylene copolymers in the process and composition of the primary reference would have been obvious to a practitioner having ordinary skill in the art at the time of the invention in order to extend the benefits cited by the secondary reference to the primary reference, namely higher efficiency and

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greater impact strength and conferral of characteristics of the propylene polymers of the secondary reference on those of the primary reference would have been obvious to a practitioner since such characteristics are necessarily associated with that of the materials of the secondary reference and motivated to extend the advantages cited by the secondary reference to the primary reference absent any showing of surprising or unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Mullis whose telephone number is (571) 272-1075. The examiner can normally be reached on Monday-Friday from 9:30 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on (571) 272-1078. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-0994.

J. Mullis:cdc

March 24, 2005

**Jeffrey Mullis**  
**Primary Examiner**  
**Art Unit 1711**

A handwritten signature in black ink, appearing to be 'J. Mullis', written over the printed name and title.